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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,481	03/01/2002	Edward J. Fewkes	SP01-273	3014
22928	7590	10/03/2003	EXAMINER	
CORNING INCORPORATED			MCCLENDON, SANZA L	
SP-TI-3-1			ART UNIT	PAPER NUMBER
CORNING, NY 14831			1711	

DATE MAILED: 10/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/087,481

Applicant(s)

FEWKES ET AL.

Examiner

Sanza L McClendon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-35 and 38-47 is/are rejected.
- 7) ☐ Claim(s) 36 and 37 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3/2001.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

*Claim Rejections - 35 USC § 112*

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
2. Claims 13 and 31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear in claim 31, lines 3, how "the cladding encompasses said cladding". Additionally, it is unclear how the where the cladding material is on applicant's optical fiber, because in line 4, the coating composition encompasses the core. Appropriate action is requested for clarification.

Regarding claim 13, it is unclear if said soft-block selected from the Markush grouping is to be added as a homopolymer component or if it is the diene in the styrene-diene copolymer? Appropriate action is required.

*Claim Objections*

3. Claims 36-37 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. There is not an effective area limitation in claims 31 and 36.

*Claim Rejections - 35 USC § 102*

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-9, 14-22, 27-35, 38-42 and 45-47 are rejected under 35 U.S.C. 102(b) as being anticipated by Chein et al (WO 00/66636).

Chein et al coated optical fibers comprising a core fiber, a cladding, an inner primary coating, and an outer coating—see abstract and figure 1. Said coated fiber is coated with a composition comprising an oligomer capable of being polymerized, a viscosity adjusting monomer, and adhesion promoter, along with other components, such as a carrier, a photoinitiator, and common optical fiber coating additives—see abstract and pages 13-15. Chein et al teaches said carriers can be carrier surfactants, ambiphilic reactive and non-reactive surfactants, wherein suitable carriers have ambiphilic molecules, such as those found in tackifier resins using in adhesive compositions—see page 14. Per examples J-L, said oligomer can be a polyether urethane acrylate oligomer, said monomer can be an acrylate monomer. Examples J-L appear to read on claims 9 and 22. The polyether urethane acrylate oligomer is exemplified by BR-3731, which is a thermoplastic urethane compound. This anticipates claims 8, 21, 40, and 45. Per examples P and R, Chein et al teaches a thermoplastic urethane resin in combination with a carrier. This anticipates claims 41-42.

With regard to independent claims 1, 18, and 31, it is noted that Chein et al does not expressly teach selecting a composition such that the Chang viscoelastic window when cured exhibits the coordinates found in claims 1, 18, and 31. However, Chein et al teaches the compositions as defined by the claims and exemplified by applicant's examples, therefore it is deemed that the optical fiber coating compositions and coated fiber taught by Chein et al inherently will comprise some, if not all, the coordinates as disclosed by claims 1, 18, and 31. Thusly, claims 2-5, 32-35, 38-39 and 46-47 are inherent also. In addition because Chein et al teaches compositions that anticipate applicant's invention, said compositions should

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inherently have a Young's Modulus as described in claims 6-7, 14-15, 19-20, and 27-28, should inherently comprise a percent elongation as defined in claims 14, 16-17, 27, and 29-30 in the absence of evidence to the contrary.

6. Claims 1-8, 10-21, 23-30, 38-39, and 41-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Dillman et al (US 5,536,772) as evidenced by Chein et al (WO 00/66636).

Dillman et al teaches radiation cured conjugated diene block copolymer compositions, wherein Dillman et al teaches said compositions are useful as pressure sensitive adhesive or coating compositions for substrates such as optical fibers—see abstract and column 11, lines 40-45. Said copolymers contain ethylenic unsaturation which are prepared by copolymerizing one or more polyolefins by themselves or with one or more alkenyl aromatic hydrocarbon monomers, such as styrene—see column 2, lines 8-11 and column 3, lines 9-12. Said copolymers can be polystyrene-polyisoprene-polybutadiene. This anticipates claims 8, 12-13, 21 and 25-26, wherein it is assumed by examiner that the soft block of claim 13 is intended to be part of the thermoplastic polymer and not a single component as claimed in claim 13—see 112 rejection above. Typical coating compositions comprise said polymer, tackifying reins, pigments, curing catalyst, reactive diluents, and solvents. Said reactive diluents can be found in column 8, lines 32-39. Said catalyst can be photoinitiator with or without photosensitizers, which can be found in column 8, lines 10-31. Said tackifiers can be found in column 9, lines 9-30, wherein aromatic and aliphatic hydrocarbon resins are taught. These anticipate claims 10-11 and 23-24, in addition to anticipating claims 41 and 42, wherein Chein et al teaches that tackifying reins can be used as carriers because of the ambiphilic nature of tackifying resin.

Dillman et al is deemed to anticipate the instant invention because Dillman et al teaches optical fiber coating compositions comprising a thermoplastic resin, such as styrene-diene block copolymers and terpolymers, reactive diluents, tackifying resin, and a photoinitiator. Therefore, the examiner deems said coating compositions will inherently will comprise some, if not all, the coordinates as disclosed by claims 1 and 18. Thusly, claims 2-5 and 38-39 are inherent also. In addition, because Dillman et al teaches compositions that anticipates applicants invention, said compositions should inherently have a Young's Modulus as described in claims 6-7, 14-15, 19-20, and 27-28, should inherently comprise a

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percent elongation as defined in claims 14, 16-17, 27, and 29-30 in the absence of evidence to the contrary.

7. Claims 1-5, 8-9, 12, 18, 21-22, 25, 38-39 and 43-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Lapin et al (5,891,930).

Lapin et al teaches coating compositions for optical fibers. Said compositions comprise an epoxy-silicone monomer crosslinkable by actinic radiation, at least one thermoplastic resin, and a photoinitiator—see abstract. Said thermoplastic resin can be a homopolymers or copolymers of alkyl (meth) acrylates.

Lapin et al is deemed to anticipate the instant invention because Lapin et al teach an optical fiber coating composition comprising a reactive monomer, a photoinitiator, a thermoplastic elastomer, and is devoid of tackifying resins. The thermoplastic resin anticipates claims 8, 12, 21, 25 and 43-44 and, also, the lack of tackifier anticipates claims 9, 22. With regards to independent claims 1 and 18, since Lapin et al teaches compositions that anticipate the instant invention said composition should inherently comprise some, if not all, the coordinates as disclosed by claims 1-5, 18,38-39, and, additionally not exhibit the coordinates set forth in claims 46-47.

*Claim Rejections - 35 USC § 103*

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 10-11 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chein et al (WO 00/66636).

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Chein et al does not expressly teach adding a tackifier resin, however Chein et al teaches that ambiphilic compounds, such as tackifying resin, can be used as carriers. Therefore, it would have been obvious for a skilled artisan to add a tackifying resin such as those listed on pages 14-15. The motivation would have been to produce a coated optical fiber that is stiff at high strain rates and soft at low strain rates—see page 14—in the absence of unexpected results or evidence to the contrary. Therefore claims 10-11 and 23-24 are read in the reference.

*Conclusion*

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 6,242,058 B1 to Bahadur et al teaches optical fibers coated with a composition comprising a substituted polyisobutylene thermoplastic polymer, a reactive diluent, and photoinitiator.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sanza L McClendon whose telephone number is (703) 305-0505. The examiner can normally be reached on Monday through Friday 8:00 to 4:30.

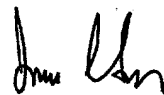
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on (703) 308-2462. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0657.

Sanza L McClendon

Examiner

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James J. Seidleck

Supervisory Patent Examiner  
Technology Center 1700

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